

ABSTRACT OF THE DISCLOSURE

A method of charging and discharging a lithium secondary battery in which a negative electrode comprises an active material including silicon provided on a current collector which is a metal which does not form an alloy with lithium. The method is characterized in that the lithium secondary battery is charged and discharged within a range of state of charge (SOC) at which no peak corresponding to a compound of lithium and silicon is observed in an X-ray diffraction pattern during charging using $\text{CuK}\alpha$ -radiation as the X-ray source.